MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

DII5018 – INTRODUCTION TO INVESTMENT

(For Diploma Students Only)

11 MARCH 2019
9.00 am – 11.00 am
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **EIGHT (8)** pages only excluding the cover page and formula appendix.
2. Formulaes given for reference in appendices.
3. Answer **ALL** questions.
4. Answers for Section A and B should be shaded on the OMR sheet provided.
5. For Section C, write your answer in the answer booklet provided.

SECTION A : MULTIPLE CHOICE QUESTIONS.
Answers should be shaded on the OMR sheets provided. [30 MARKS]

1. Financial assets _____.
   A. directly contribute to the country's productive capacity
   B. indirectly contribute to the country's productive capacity
   C. contribute to the country's productive capacity both directly and indirectly
   D. do not contribute to the country's productive capacity either directly or indirectly

2. A fixed-income security pays _____.
   A. a fixed level of income for the life of the owner
   B. a fixed stream of income or a stream of income that is determined according to a specified formula for the life of the security
   C. a variable level of income for owners on a fixed income
   D. a fixed or variable income stream at the option of the owner

3. An example of a derivative security is/are _____.
   A. a common share of Microsoft
   B. an Intel bond
   C. a commodity futures contract and a call option on Intel stock
   D. a call option on Intel stock and an Intel bond

4. Financial assets can permit all of the following **EXCEPT** _____.
   A. consumption timing
   B. allocation of risk
   C. separation of ownership and control
   D. elimination of risk

5. Security selection refers to _____.
   A. choosing which securities to hold based on their valuation
   B. investing only in "safe" securities
   C. the allocation of assets into broad asset classes
   D. top-down analysis

6. Investors trade previously issued securities in the _____ market(s).
   A. primary
   B. secondary
   C. primary and secondary
   D. derivatives

Continued ...

7. Money market securities _____.
   A. are long term, highly marketable, and generally very low risk
   B. are short term, not marketable, and generally very low risk
   C. are short term, highly marketable, and generally very high risk
   D. are short term, highly marketable, and generally very low risk

8. A type of investment that provides high liquidity?
   A. Common stock.
   B. Long term investments.
   C. Real estate.
   D. Hedge funds.

9. Investors seeking a diversified, professionally managed portfolio of securities can purchase share of _____.
   A. government bonds
   B. common stock
   C. real estate
   D. mutual fund

10. According to the investor's life cycle, the age range for income oriented investor is between:
   A. 1-20.
   B. 20-45.
   C. 45-60.
   D. 60-100.

11. Which of the following explain the mutual fund?
   A. Portfolio of stocks, bonds, and other securities created by pooling the funds of many different investors.
   B. Funds that pool resources from different investors, but usually have higher minimum investments and are less regulated than mutual funds.
   C. Conservative investments with lives of 1 year or less.
   D. Represents an ownership share of a corporation.

12. Which of the following refers to the career that requires broad understanding of functional areas of a business?
   A. Financial planning.
   B. Investment banking.
   C. Insurance.
   D. Corporate finance.

Continued ...

13. Which one of the following statements about foreign investments is **TRUE**?
    A. In general, major foreign markets always tend to underperform the Malaysia market.
    B. Investing in foreign markets may involve specific risks not encountered with domestic securities.
    C. Investing in foreign markets will always produce higher returns because of exchange rate fluctuations.
    D. Foreign markets include equity securities only.

14. "Research and gather information on specific investments", falls under which step of investing?
    A. Step 1.
    B. Step 2.
    C. Step 5.
    D. Step 6.

15. Mr. Syafiq, currently 35 years old, should choose _____ if he wants to make an investment.
    A. preferred stocks
    B. government bonds
    C. mutual fund
    D. common stocks

16. The money market is the market in which _____ are traded.
    A. new issues of securities
    B. previously issued securities
    C. short-term debt instruments
    D. long-term debt and equity instruments

17. Security _____ link buyers and sellers by buying and selling securities at stated prices, while _____ are agents of investors who match buyers with sellers of securities.
    A. brokers; dealers
    B. brokers; agents
    C. agents; dealers
    D. dealers; brokers

18. An investor who invests all her funds into one type of asset will _____ her portfolio's _____.
    A. increases; diversification
    B. decreases; diversification
    C. increases; average return
    D. decreases; average return

Continued ...

19. Which of the following refers selling stock borrowed from another investor?
    A. A long position.
    B. A margin trade.
    C. A short sale.
    D. A limit order.

20. If a stock is bought on margin, _____.
    A. the whole investment value is being finance using investor's own fund
    B. part of the cost of investment is borrowed
    C. the commissions on the investment are increased
    D. the cost of the investment is reduced

21. Which one of the following statements concerning the primary market is **CORRECT**?
    A. The first public sale of a company's stock is called an IPO.
    B. A transaction in the primary market is between two private stockholders.
    C. The first public sale of a company's stock in the primary market is called a seasoned new issue.
    D. A rights offering is a direct sale of stock to an institution that participates in the primary market.

22. Which of the following can be described as involving direct finance?
    A. A corporation takes out a loan from a bank.
    B. People buy shares in a mutual fund.
    C. A corporation buys a short-term security issued by another corporation.
    D. An insurance company buys shares of common stock in the over-the-counter markets.

23. Reducing risk through the purchase of assets whose returns do not always move together is _____.
    A. globalisation
    B. regulation
    C. intervention
    D. diversification

24. Mei Yean bought 100 shares of stock at a price of RM24 a share. She used her 70% margin account to make the purchase. Mei Yean sold her stock after a year for RM20 a share. Ignoring margin interest and trading costs, what is Mei Yean's return on investor's equity for this investment? **(Round up to the nearest figure)**
    A. -17%.
    B. -24%
    C. 24%
    D. -56%

Continued ...

25. Kim Seng purchased 200 shares of stock at RM19 using her 70% margin account. His maintenance margin is 40%. Kim Seng has no other securities in his account. At what price will Kim Seng receive a margin call?
    A. RM3.80
    B. RM5.70
    C. RM9.50
    D. RM13.30

26. Aishah purchases 400 share with a price of RM3.50 per share. She utilises 40% of her margin account. What will be her initial equity?
    A. RM560
    B. RM840
    C. RM380
    D. RM750

27. Gan purchased 300 unit of shares at a price of RM30 per share. Assume he utilised his 40% margin account to make the purchase. What is Gan's debit balance in this investment?
    A. RM2,000
    B. RM3,600
    C. RM200
    D. RM5,400

28. Yogish purchased 250 unit of shares at a price of RM15 per share. He utilised 70% margin account to make the purchase. What is Yogish's initial equity in this investment?
    A. RM3,100
    B. RM1,125
    C. RM1,850
    D. RM2,625

29. Cheryl invested RM3,000 and purchased shares of a Singapore corporation when the exchange rate was (Sing. Dollar) $1.00 = RM2.50. After six months, she sold all of the shares for $2,000, when the exchange rate was $1.00 = RM3.00. No dividends were paid during the time Cheryl owned the shares of stock. What is the amount of Cheryl's gain on this investment?
    A. RM3,000
    B. RM6,000
    C. RM1,500
    D. RM4,500

Continued ...

30. Including foreign investments in a portfolio _____.
    A. decreases the overall diversification of the portfolio
    B. reduces the potential rate of return
    C. limits the diversification amongst industries
    D. provides potential benefits from changes in currency values

SECTION B : TRUE OR FALSE QUESTIONS. Answers should be shaded on the OMR sheets provided. Shade A for True, and B for False answer. [10 MARKS]

31. Short-term investment have a life of 1 year or less and usually carry little or no risk.
32. Dividends are payments the corporation makes to its shareholders.
33. Bonds are short-term debt instruments issued by corporations and governments.
34. Third steps in investing is evaluating the investments.
35. Active income includes earnings generated from various types of investments.
36. Bull market are normally associated with rising prices, economic recovery and government stimulus.
37. Diversification of the securities markets enables investors to seek out opportunities to profit from rapidly expanding economies throughout the world.
38. Major advantage of selling short is, the chance to profit from a price decline.
39. Before offering its securities for public sale, the issue must register with and obtain approval from the Securities Commission.
40. Most public offerings are made with the assistance of an investment banker.

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SECTION C [60 MARKS]

QUESTION 1

Year	Expected Return (%)		
	Asset K	Asset L	Asset M
2015	12	16	12
2016	14	12	14
2017	16	12	16

You want to make an investment in a portfolio, which consist of assets K, L and M. Two options are given as follow :
Option 1 : Asset K and asset L with equal proportions.
Option 2 : Asset K and asset M with 70% and 30% respectively.

a) Calculate the expected portfolio return for each year for the two options given. (6 marks)
b) Calculate the average expected portfolio return for each option. (6 marks)
c) Calculate the standard deviation of portfolio for option 1 only. (5 marks)

(Total 17 marks)

QUESTION 2

a) i) If the market price of underlying common stock is RM40 per share, calculate the conversion value of a convertible bond that carries a conversion ratio of 1.8. (3 marks)

ii) Would there be any conversion premium if the convertible bond was selling at RM90 a share? (**Calculate conversion premium in RM and percentage**) (4 marks)

b) A bond is currently selling in the market for RM928.62. It has a coupon of 10% and a 10 year maturity. Calculate the yield to maturity on this bond. (5 marks)

c) State **ONE (1)** biggest factor that influences the price of bonds. (1 marks)

(Total 13 marks)

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QUESTION 3

a) Investors always rely on types of stocks to help them in designing their portfolios in order to achieve a good balance of risk and return. State and explain any **THREE (3)** types of stocks available in the market. (6 marks)

b) The following information is available for Go Go Corporation.

Sales	RM 259, 593
Current Assets	RM111,914
Total Assets	RM 303, 940
Current Liabilities	RM 50, 862
Long Term Debt	RM 40, 735
Profit Margin	13.65%

Based on the information above, calculate Go Go Corporation's :

i) Current ratio. (2 marks)
ii) Net Income. (2 marks)
iii) Return on Equity. (5 marks)

(Total 15 marks)

QUESTION 4

a) Based on the information on the table below, answer the following questions.

Fund	Expected price (RM)	Fund Asset (RM)	Fund Liabilities (RM)	Shares Outstanding
O	3.5	500,000	200,000	100,000
P	4.0	350,000	90,000	80,000

i) Calculate the NAV per unit for each fund. (6 marks)
ii) If Ng Kai Li plan to buy 500 units of shares for each fund, compute the total amount (RM) that she needs to invest. (5 marks)

b) Explain **TWO (2)** uses of mutual fund. (4 marks)

(Total 15 marks)

End of Page.

Appendix

1. Margin $= \frac{V-D}{V}$

2. Return on invested capital from a margin transaction

$$= \frac{\text{Total current income received} - \text{Total interest paid on margin loan} + \text{Capital gain/loss}}{\text{Amount of equity at purchase}}$$

3. Risk-free rate = Real rate of return + Expected inflation premium

4. Required return on investment j = Risk-free rate + Risk premium for investment j

5. HPR $= \frac{\text{Income during period} + \text{Capital gain/loss during period}}{\text{Beginning investment value}}$

6. $FV = PV\,(1 + r)^n$

7. $D_1 = D_0\,(1 + g)^n$

8. Standard Deviation $= \sqrt{\frac{\sum_{t=1}^{n}(ri - \bar{r})^2}{n-1}}$

9. Portfolio return $= \sum_{j=1}^{n}(w_j \times r_j)$

10. $r_j = R_F + [\, b_j \times (r_m - R_F)\,]$

11. Portfolio beta $= \sum_{j=1}^{n}(w_j \times b_j)$

12. EPS $= \frac{\text{Net Income} - \text{Preferred dividends}}{\text{Number of shares of common stock outstanding}}$

13. Dividend yield $= \frac{\text{Anual dividends received per share}}{\text{Current market price of the stock}}$

14. Dividend payout ratio $= \frac{\text{Dividends per share}}{\text{Earnings per share}}$

15. Total returns

= Current income + Capital gains/losses ± Changes in currency exchange rates

16. Current ratio $= \frac{\text{Current assets}}{\text{Current liabilities}}$

17. Net working capital = Current assets – Current liabilities

18. Accounts receivable turnover = $\frac{\text{Annual sales}}{\text{Accounts receivable}}$

19. Inventory turnover = $\frac{\text{Annual sales}}{\text{Inventory}}$

20. Total asset turnover = $\frac{\text{Annual sales}}{\text{Total assets}}$

21. Debt-equity ratio = $\frac{\text{Long-term debt}}{\text{Stockholders' equity}}$

22. Time interest earned = $\frac{\text{EBIT}}{\text{Interest expenses}}$

23. Net profit margin = $\frac{\text{Net profit after taxes}}{\text{Total revenue}}$

24. ROA = $\frac{\text{Net profit after taxes}}{\text{Total assets}}$

25. ROE = $\frac{\text{Net profit after taxes}}{\text{Stockholders' equity}}$

26. P/E = $\frac{\text{Net price of common stock}}{\text{EPS}}$

27. PEG ratio = $\frac{\text{Stock's P/E ratio}}{\text{3-to-5 year growth rate in earnings}}$

28. Dividend per share = $\frac{\text{Annual dividend paid to common stock}}{\text{Number of common shares outstanding}}$

29. Payout ratio = $\frac{\text{Dividends per share}}{\text{Earnings per share}}$

30. Book value per share = $\frac{\text{Common stockholders' equity}}{\text{Number of common shares outstanding}}$

31. Price-to-book-value = $\frac{\text{Market price of common stock}}{\text{Book value per share}}$

32. Taxable equivalent yield = $\frac{\text{Yield on municipal bond}}{\text{1-Federal tax rate}}$

33. Taxable equivalent yield for both federal and state taxes

$$= \frac{\text{Municipal bond yield}}{1-[\text{Federal tax rate} + \text{state tax rate } (1 - \text{Federal tax rate})]}$$

34. Conversion value = Conversion ratio x Current market price of the stock

35. $\text{Conversion equivalent} = \frac{\text{Current market price of the convertible bond}}{\text{Conversion ratio}}$

36. Conversion premium (in RM)

= Current market price of the convertible bond – Conversion value

37. $\text{Conversion premium (in \%)} = \frac{\text{Conversion premium (in RM)}}{\text{Conversion value}}$

38. Payback period =

$$\frac{\text{Conversion premium (in RM)}}{\text{Annual interest income from the convertible bond} - \text{Annual dividend income from the underlying common stock}}$$

39. $\text{Current yield} = \frac{\text{Annual interest income}}{\text{Current market price of the bond}}$

40. $\text{Yield to maturity} = \frac{\text{Annual interest} + \frac{\text{Par value} - \text{Market price}}{\text{Number of years to maturity}}}{\frac{\text{Par value} + \text{market price}}{2}}$

41. $\text{Yield to call} = \frac{\text{Annual interest} + \frac{\text{Call price} - \text{Market price}}{\text{Number of years to call}}}{\frac{\text{Call price} + \text{market price}}{2}}$

42. $\text{Premium (or discount)} = \frac{\text{Share price} - \text{NAV}}{\text{NAV}}$

43. HPR =

$$\frac{(\text{Number of shares at end of period x Ending price}) - (\text{Number of shares at beginning of period x Initial price})}{\text{Number of shares at beginning of period x Initial price}}$$

44. $\text{NAV} = \frac{\text{Fund assets} - \text{Fund liabilities}}{\text{Number of units outstanding}}$